

Earnings Management and Financial Performance of Listed Firms in Nigeria

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Abstract

The study focused on earnings management and financial performance of listed firms in Nigeria. Real earnings management, accrual earnings management and income smoothing earnings management were used as proxies for earnings management. However, return on asset was used as proxy for financial performance. To achieve the objective of the study, ex-post facto research design was adopted. The data were collected through secondary source from annual report and accounts of the selected firms in Nigeria from 2015 to 2024. The population of the study comprised of all the 149 firms listed in Nigeria exchange group as at 2025. The sample size was derived using both purposive sampling techniques and 70 listed firms were purposively selected. The data collected were analyzed using Panel GMM analysis. The findings revealed that Firms should adopt transparent disclosure practices, providing detailed breakdowns of earnings components. Clear reporting reduces opportunities for real earnings management (e.g., manipulating cash flows or expenses), ensuring that return on asset is not distorted by short-term manipulations. Also, firms should invest in ethics training for management and finance teams to discourage earnings management practices. Ethical leadership can prioritize long-term financial health over short-term boosts to return on asset, aligning reported performance with actual operational efficiency.

Keywords: *Earnings management, Real earnings management, Accrual earnings management, Income smoothing earnings management, Financial performance and Return on asset.*

1.0 INTRODUCTION

Earnings, often referred to as the “bottom line” or “net income,” are a crucial metric in a firm's income statement, representing its financial stability, profitability, and market strength.

Undoubtedly, earnings figures serve as a summary measure that captures the overall performance of a company (Ni, Meng, Chen, Zhao, Chen, Li & Chan, 2024), providing valuable signals for both internal and external stakeholders. Earnings power is the key to a firm's success, hence, managers utilize earnings information in compensation plans, while investors and creditors rely on it to assess the firm's financial health and risk profile.

Nevertheless, He, Chen and Liu, (2020), document that the strategic significance of earnings in decision-making and performance evaluation has given rise to earnings management practices which involves the deliberate manipulation of financial statements by managers to meet specific targets, influence perceptions, or achieve desired contractual outcomes. Although, while earnings management practices may not always violate accounting standards (Jooste, 2013; Braun & Rodriguez Jr, 2008), they often distort the economic reality presented in financial reports, then creating challenges for stakeholders seeking accurate and reliable information (Navarro & García & Madrid & Guijarro, 2014; Dechow & Skinner, 2020). This view aligns strongly with the opinions of Li *et al.*, (2019) and Dechow, *et al.*, (2012) who noted that while earnings management may temporarily enhance reported performance, creating an illusion of stability or growth, it often undermines long-term financial sustainability by eroding trust and escalating risk exposure.

Earnings management has become a critical issue in understanding firm financial profitability, especially as companies face increasing pressure to meet financial targets and maintain investor confidence. Studies have shown that earnings management can distort a firm's reported financial health, leading to discrepancies between actual and reported profitability. Such manipulation not only affects short-term performance but also has long-term implications for firm value, investor trust, and regulatory interventions (Akers, Giacomino & Gissel, 2007; Kumandang & Hendriyeni, 2021). Extant literature including that of Duić (2024) highlights the use of discretionary accrual manoeuvre in shaping profitability perceptions, while Blue, *et al.*, (2024) discussed how firms in emerging economies often smooth profits to remain competitive in volatile markets. Real earnings management, while potentially beneficial for short-term financial optics, can undermine the overall stability and transparency of financial reporting, thus affecting firm profitability in many crucial ways (Comporek, 2023). Similarly, Eshiet, *et al.*, (2023), noted that poor investment decisions resulting from earnings manipulations are a bane to market efficiency and economic development for both developed and developing economies.

This study focuses on the impact of earnings management on the financial performance of firms in Nigeria, using real earnings management, accrual earnings management, and income smoothing as measures of earnings management, and return on assets (ROA) as measure of financial performance. Understanding the relationship between these variables is crucial for assessing the integrity of financial reporting in Nigeria and its implications for firm sustainability, investor confidence, and economic development.

Real earnings management involves altering real business activities to manipulate reported earnings. Examples include reducing discretionary expenses, overproducing inventory to lower the cost of goods sold, or delaying investments to boost short-term profits (Roychowdhury & Watts, 2020). While REM may improve reported earnings in the short term, It can have detrimental long-term effects on a firm's operational efficiency and competitiveness. In Nigeria, where firms often face pressure to meet short-term financial targets due to market expectations or loan covenants, REM is a common practice.

Accrual earnings management involves manipulating accounting estimates and policies within the bounds of generally accepted accounting principles (GAAP) to alter reported earnings. This includes adjusting provisions for bad debts, depreciation methods, or revenue recognition policies

(Dechow *et al.*, 2015). AEM is less costly than REM in the short term because it does not involve altering real business activities. However, excessive use of AEM can erode the credibility of financial statements, especially in Nigeria, where regulatory oversight may not be robust enough to detect such manipulations.

Income smoothing is a form of earnings management where managers manipulate earnings to reduce fluctuations in reported income, creating the appearance of stable performance (Fudenberg & Tirole, 2015). This practice is often used to signal financial stability to investors and creditors. In Nigeria, income smoothing is prevalent among firms seeking to maintain investor confidence in a volatile economic environment characterized by currency fluctuations, inflation, and political uncertainties.

The relationship between earnings management and financial performance is complex and context-specific. In the short term, earnings management may enhance reported financial performance by inflating metrics such as ROA. For example, reducing discretionary expenses through REM can boost short-term profits, while manipulating accruals can improve reported earnings without affecting cash flows (Cohen, *et al.*, 2018). However, these practices can have adverse long-term consequences. Excessive REM may lead to operational inefficiencies, while AEM can erode investor trust when manipulations are discovered (Dechow *et al.*, 2020).

In Nigeria, the impact of earnings management on financial performance is particularly significant due to the country's economic and regulatory environment. For instance, firms engaging in REM may sacrifice long-term growth by cutting research and development or maintenance expenses, which can negatively affect future ROA and ROE (Roychowdhury, & Watts, 2020). Similarly, income smoothing may create a false sense of stability, leading to misinformed investment decisions and potential financial distress when actual performance falls short of expectations (Ezeagba, 2017).

In Nigeria, the regulatory landscape for financial reporting is guided by institutions such as the Financial Reporting Council of Nigeria (FRCN) and the Nigerian Exchange Group (NGX). These bodies enforce standards like the International Financial Reporting Standards (IFRS) to ensure transparency and consistency in corporate reporting. However, despite these frameworks, the prevalence of earnings management remains significant among non-finance firms (Toru & Ogoun, 2024). Factors contributing to this include weak enforcement mechanisms, market inefficiencies, and the prevalence of informal business practices in the Nigerian economy. Further, listed firms in Nigeria operate within a dynamic business environment characterized by volatility, regulatory pressures, and competitive market conditions. Therefore, earnings management in this context often arises as a response to short-term performance pressures, enabling firms to influence key financial metrics such as profitability and liquidity ratios (Kałdoński, *et al.*, 2020; Fields, *et al.*, 2018). As noted by Lin & Yen, (2017) financial performance of firms is a key determinant of market valuation, investor trust, and access to capital. In Nigeria, where access to finance is constrained by high borrowing costs and limited capital market depth (Adetiloye, *et al.*, 2015; Gumel & Bardai, 2021), financial performance plays a pivotal role in determining firms' competitiveness (Akben-Selcuk, 2016). Earnings management, therefore, becomes a double-edged sword: a tool for signalling financial strength in the short term, but a potential threat to financial integrity if overused or detected. Thus, while the linkage between earnings management and financial performance remains complex, it serves as a critical lens for evaluating corporate governance and financial integrity in developing markets like Nigeria.

The broad objective of this study is to determine the effect of earnings management on firm financial performance of listed firms in Nigeria. Specifically, the study intends to:

1. Investigate the effect of real earnings management practices on return on assets (ROA) of listed firms in Nigeria.
2. Examine the effect of accrual earnings management practices on return on assets (ROA) of listed firms in Nigeria.
3. Evaluate the effect of income smoothing earnings management practices on return on assets (ROA) of listed firms in Nigeria.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Earnings management

The term earnings management and use of the average values of total accruals as a measure of earnings management was first promoted by Hepworth in 1953. Earnings management is a multifaceted concept that encapsulates the deliberate intervention by management in the financial reporting process to influence perceived organizational performance. The term is not inherently pejorative, as it includes practices that range from permissible managerial discretion to outright financial manipulation. El Diri (2017) emphasizes that earnings management is rooted in the flexibility of accounting standards, allowing managers to exploit legal loopholes to alter financial outcomes strategically. However, the ethical and professional implications of such practices remain contentious. Beyer, Guttman, and Marinovic (2019) describe earnings management as a tool for reducing earnings volatility, ensuring that financial reports meet external expectations, such as analysts' forecasts or internal goals like bonus thresholds. Liu & Liang, (2024) note that the theoretical complexity of earnings management lies in its dual potential to either enhance or detract from financial transparency.

In academic discourse, the earnings management definitions vary, reflecting its ethical duality. Martínez-Ferrero and Banerjee (2016) framed it as a discretionary exercise that, while possibly improving short-term financial optics, can undermine the credibility of reported earnings. This perspective aligns with concerns over opportunistic behavior, where managers prioritize personal gain or shareholder appeasement at the expense of long-term organizational value. Conversely, Srivastava (2019) introduces the concept of earnings management as a strategic adaptation to external shocks, portraying it as a mechanism for conveying management's insights into future uncertainties. This duality is further complicated by the interplay of managerial incentives, stakeholder pressures, and regulatory frameworks. Kolsi and Grassa (2017) argue that a firm's corporate governance structures significantly mediate the prevalence and acceptability of earnings management, suggesting that robust oversight can channel managerial discretion toward more constructive applications. The theoretical foundation, thus, situates earnings management at the crossroads of ethical discretion and exploitative manipulation, dependent on its context and intent. Earnings management manifests through various techniques, including accrual-based earnings management and real earnings management. accrual-based earnings management involves the manipulation of accounting entries, such as adjusting depreciation schedules or provision estimates, to meet desired financial outcomes. Real earnings management, on the other hand, relies on altering operational decisions, like overproduction or timing sales, to influence cash flows and reported earnings. As Capkun, Collins, and Jeanjean (2016) observe, accrual-based earnings management exploits accounting flexibility, while real earnings management has a direct impact on a firm's actual operations. Income smoothing is another prevalent form of earnings management, whereby firms intentionally dampen profit volatility to present a steady growth trajectory, often to enhance investor confidence. Additionally, some firms engage in small profit

patterns, ensuring they meet or slightly exceed critical benchmarks, such as analysts' forecasts. Timely loss recognition represents another facet, where firms accelerate loss reporting during economically challenging periods to clear "bad news" and reset their financial trajectory. Moratis and Van Egmond (2018) highlight that these practices are often influenced by industry norms, governance quality, and cultural factors, underscoring the complex interplay of contextual variables that define the application of earnings management. Each of these techniques exemplifies the diverse motivations and methodologies underlying earnings management and have been further explained in subsequent themes.

2.1.2 Financial performance

The concept of financial performance has garnered significant attention within the fields of finance, management, and economics due to its centrality in assessing organizational success and sustainability. At its core, financial performance refers to the capacity of an organization to generate economic value and meet its financial obligations through the efficient allocation and utilization of resources. Kaplan and Norton (2015), financial performance encompasses measures that reflect profitability, operational efficiency, and long-term growth potential, thereby serving as a critical indicator of an organization's competitive position. It is essential to recognize, however, that financial performance is a multifaceted construct, with scholars offering diverse interpretations. For instance, Keasey *et al.* (2016) argue that financial performance is inherently multidimensional, comprising both quantitative measures like revenue and profit margins and qualitative aspects such as stakeholder satisfaction and market perception.

Divergent scholarly definitions have expanded the conceptual boundaries of financial performance. Nguyen and Tran (2018) define financial performance as the degree to which an organization achieves its strategic financial objectives, emphasizing its alignment with broader corporate goals. On the other hand, Ismail and Rahman (2019) emphasize the relevance of financial performance as a diagnostic tool for managerial decision-making and risk assessment. These interpretations underscore the elasticity of the term, highlighting its adaptability to varied analytical contexts. Notably, recent studies have also argued for an integrative perspective that incorporates external environmental factors, such as economic trends and regulatory frameworks, into the conceptualization of financial performance (Chowdhury & Maung, 2020). Such perspectives argue that a comprehensive understanding of financial performance must account for both internal organizational metrics and external market dynamics.

Prior literature also reflects a consensus that financial performance serves as a benchmark for comparing organizations within and across industries. Youssef *et al.* (2021), argued that it provides a standardized framework for assessing efficiency, competitiveness, and the potential for sustainable growth. Nevertheless, the proxies used to measure financial performance vary, reflecting the diverse theoretical underpinnings of the concept. While certain studies emphasize traditional financial ratios, others advocate for broader measures incorporating environmental, social, and governance (ESG) factors (Kim & Kim, 2022). Therefore, this ongoing debate about the appropriate conceptualization and operationalization of financial performance underscores its relevance as a dynamic and evolving construct within academic discourse and practical application.

Financial performance metrics are critical tools for assessing a company's efficiency, profitability, and overall health. Among the most widely used metrics are Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). These ratios provide insights into how effectively a company utilizes its resources, generates returns for shareholders, and manages its profitability

relative to revenue. Return on Assets, Return on Equity, and Net Profit Margin are essential financial metrics that offer unique insights into a company's performance. ROA measures asset efficiency, ROE evaluates shareholder returns, and NPM assesses profitability relative to revenue. While each metric is valuable, their interpretation requires context, including industry norms, capital structure, and accounting practices. By using these ratios in conjunction, stakeholders can make informed decisions about a company's operational and financial strategies.

Return on Assets (ROA)

Return on Assets (ROA) measures how efficiently a company uses its assets to generate profits. It is calculated as:

$$\frac{\text{Net Income}}{\text{Total Assets}}$$

Net income represents the company's profit after all expenses, taxes, and interest, while total assets include both current and non-current assets, such as cash, inventory, property, and equipment. ROA is expressed as a percentage, indicating the amount of profit generated per dollar of assets. For example, an ROA of 5% means the company earns \$0.05 for every dollar of assets.

ROA is a vital indicator of operational efficiency, particularly for asset-intensive industries like manufacturing or utilities. A higher ROA suggests better asset utilization, while a lower ROA may indicate inefficiencies or underperforming investments. According to Brigham and Ehrhardt (2017), ROA is particularly useful for comparing firms within the same industry, as asset structures and business models vary significantly across sectors. For instance, a technology company with minimal physical assets may have a higher ROA than a heavy machinery manufacturer, even if their profitability levels are similar.

However, ROA has limitations. It does not account for the capital structure of a company (i.e., the mix of debt and equity financing). Companies with high debt may report lower ROA due to larger asset bases, even if they are operationally efficient. Additionally, ROA can be distorted by accounting practices, such as asset valuation or depreciation methods (Penman, 2013).

2.1.3 Real Earnings Management and Financial Performance

Real earnings management, which involves altering the timing or structure of real business transactions to influence reported earnings, has elicited divergent theoretical perspectives regarding its impact on financial performance. Proponents of the positive disposition argue that real earnings management, as a technique, allows firms to navigate short-term financial pressures and maintain stability. This perspective is supported by signaling theory, which suggests that real earnings management can be a strategic tool for managers to convey private information about the firm's future prospects (Spence, 1973). By strategically managing production, discretionary expenditures, or revenue recognition, managers may optimize resource allocation, improve perceived financial health, and secure investor confidence. Studies grounded in this framework suggest that real earnings management enables firms to mitigate agency conflicts and better align stakeholder interests with organizational goals, particularly in dynamic or uncertain markets (Cohen & Zarowin, 2010). From this vantage, real earnings management is considered an adaptive mechanism that can enhance financial performance if executed judiciously within legal and ethical boundaries.

Conversely, critics who adopt a negative disposition emphasize that real earnings management may compromise the long-term sustainability of financial performance by prioritizing short-term gains over substantive value creation. *Agency theory*, as articulated by Jensen and Meckling (1976), underpins this viewpoint by highlighting potential conflicts of interest between managers

and shareholders. Agency theory posits that real earnings management can exacerbate managerial opportunism, as managers manipulate real activities—such as overproduction to reduce cost of goods sold or cutting discretionary expenses like R&D—to meet earnings targets or personal performance benchmarks. These actions, while potentially yielding immediate financial benefits, often impair the firm's operational efficiency, innovation capacity, and overall competitiveness, leading to adverse financial outcomes in the long run (Roychowdhury, 2006). Thus, critics contend that real earnings management undermines the reliability of reported earnings and misleads investors, eroding trust and negatively affecting financial performance.

2.1.4 Accrual Earnings Management and Financial Performance

The debate on the nexus between accrual earnings management and financial performance has elicited diverse theoretical interpretations, again reflecting three broad perspectives: positive, negative, and neutral dispositions. Proponents of often draw from signaling theory, which suggests that managers manage accruals as a mechanism to convey private information about the firm's future prospects. By adjusting accruals, firms can present financial statements that align more closely with their perceived intrinsic value, thereby reducing information asymmetry and bolstering investor confidence (Healy & Wahlen, 1999). This perspective posits that accrual management when employed judiciously, serves as a strategic tool to mitigate market inefficiencies and enhance firm value. Further, supporters argue that such practices can be particularly beneficial during periods of market volatility or economic uncertainty, enabling firms to project stability and attract investments (Dechow *et al.*, 2017).

Conversely, critics emphasize the potential detrimental effects of accrual earnings management on financial performance, drawing heavily on *agency theory*. This theory underscores the inherent conflict of interest between managers and shareholders, suggesting that accrual earnings management can be a self-serving practice aimed at meeting short-term targets rather than enhancing long-term value (Jensen & Meckling, 1976). Such opportunistic behavior may include overstating revenues or deferring expenses, practices that can inflate earnings temporarily but erode stakeholder trust and firm performance over time. Empirical evidence supports the negative disposition, highlighting cases where aggressive accrual manipulation led to corporate scandals and financial distress (Enron being a classic example). Critiques argue that accrual earnings management undermines the integrity of financial reporting, creating a misalignment between reported and actual firm performance (Lev & Nissim, 2019).

2.1.5 Income Smoothing Earnings Management and Financial Performance

Within academic discuss, income smoothing financial performance linkage has elicited diverse theoretical interpretations, presenting positive, negative, and neutral perspectives. The positive disposition to this linkage is anchored in signaling theory, which posits that income smoothing serves as a mechanism for managers to convey credible signals about a firm's stable future cash flows and operational resilience (Healy & Wahlen, 2017). This view argues that income smoothing reduces perceived risk, thereby enhancing investor confidence and potentially increasing firm valuation. Jackson, Wilcox & Strong, (2002), contend that by strategically leveraging discretionary accruals or real activity adjustments, managers achieve a less volatile income trajectory, which stakeholders interpret as a sign of prudent financial stewardship. Moreover, depreciation adjustments, reserve allocations, and revenue timing are believed to strengthen the firm's appeal to external investors by creating an aura of predictability in financial performance, fostering long-term profitability and stability (Dechow *et al.*, 2017).

But on the flip side, critics of income smoothing emphasize its potential to distort the informational value of financial reports, leading to adverse consequences for financial performance. Deeply rooted in agency theory, this school of thought highlights the divergence between managerial and shareholder interests, whereby managers may exploit income smoothing techniques to conceal suboptimal performance or pursue self-serving objectives, such as achieving performance-linked bonuses or avoiding debt covenant violations (Jiraporn *et al.*, 2015). The manipulation of discretionary accruals or operational metrics, while permissible within accounting standards, can erode transparency and undermine market efficiency by presenting an inflated view of the firm's financial health. Reinhart & Reinhart, (1999) recon that over-reliance on adjusting reserves or revenue recognition policies might create temporary gains but expose the firm to future liabilities, ultimately harming long-term performance and credibility. This negative disposition underscores the ethical dilemmas associated with income smoothing and its implications for stakeholder trust. A neutral position suggests that the impact of income smoothing on financial performance is context-dependent, shaped by factors such as the regulatory environment, industry norms, and corporate governance practices. Institutional theory supports this perspective by arguing that income smoothing is often a response to isomorphic pressures rather than a deliberate strategy to mislead or enhance performance (DiMaggio & Powell, 1983). Firms operating in highly regulated or scrutinized industries may adopt income smoothing to align with stakeholder expectations and maintain legitimacy, without necessarily improving or worsening financial performance (Abodakpi, Jacobson & Stelmach, 2024). Accrual adjustments and real activities management, are merely tools whose outcomes depend on the organizational context and managerial intent (Csoma, 2015; Vousinas, 2015). This balanced view is echoed among extant studies, which caution against oversimplified judgments, advocating for a better understanding of the practice's ethical and economic implications (DeFond & Zhang, 2019).

2.2 Theoretical Review

2.2.1 Agency theory

Agency theory, originally developed by Jensen and Meckling (1976), provides a foundational theoretical framework for understanding the relationship between earnings management and financial performance, particularly in distressed firms. The theory is predicated on the principal-agent relationship, where principals (shareholders) delegate decision-making authority to agents (managers), creating potential conflicts of interest due to divergent goals. One of the key assumptions of the agency theory is that agents are self-interested and may act opportunistically, prioritizing personal objectives over the interests of principals. This misalignment often manifests in situations of information asymmetry, where agents possess superior knowledge about the firm's operations and financial status compared to principals, enabling behaviors such as earnings management (Shapiro, 2005). This theoretical framework is particularly relevant in the context of distressed firms, as financial distress amplifies the pressure on managers to manipulate earnings to portray a favorable performance and attract external financing or retain stakeholder confidence (Armstrong *et al.*, 2016).

Agency theory is particularly well-suited to link earnings management with financial performance in distressed firms because it emphasizes the opportunistic behavior of managers under conditions of weak governance and heightened incentives (Wagenhofer, 2015; Lopes, 2016). Accordingly, managers of financially distressed firms are more likely to engage in earnings management to avoid bankruptcy triggers, meet debt covenants, or present an illusion of recovery (Healy & Palepu, 2017). This aligns with theoretical views that earnings management can serve both as a

tool for survival and as a mechanism for potential deception. Further, the agency theory framework underscores the role of governance mechanisms, such as monitoring by boards or external auditors, in mitigating agency conflicts, making it particularly relevant for examining how distressed firms may exploit governance gaps. Through this lens, agency theory not only explains the behavior of managers in distressed firms but also underlines the broader implications for financial performance and stakeholder trust in such contexts.

2.3 Empirical Review

Umobong (2024), investigated the impact of earnings management on financial performance of manufacturing firms in Nigeria using data from the Nigerian Exchange Group over the period from 2013 to 2022. The research examined firm performance through dependent variables like return on assets, net profit margin, and price-to-earnings ratio, while the independent variables included discretionary accruals, related party transactions, and real earnings management. The analysis was conducted on panel data, employing dynamic panel estimation techniques such as the panel-corrected standard errors method to address potential cross-sectional dependencies. Findings revealed that discretionary accruals positively influenced returns on assets and net profit margins, while real earnings management exerted a negative impact. Notably, related party transactions showed mixed effects, depending on the performance measure.

Shittu *et al.*, (2023), investigated the influence of earnings management on the performance of non-finance firms listed on the Nigerian Stock Exchange, focusing on both accrual-based and real earnings management strategies. The study examined data from Nigeria spanning the period of 2010 to 2020, covering ten diverse sectors, including services, consumer goods, industrial goods, and oil and gas. The dependent variable was return on capital employed, while discretionary accruals and real earnings management served as the independent variables, with firm size and firm age as control variables. Using an ex-post facto research design, the study purposively selected 76 firms out of a population of 113, yielding 760 observations. Findings revealed that discretionary accruals positively and significantly influenced performance, while real earnings management had a significant negative effect.

Abdeljawad and Alia (2023), explored the impact of earnings management on unexpected stock returns within the context of the Palestinian stock market for the period from 2010 to 2020, encompassing firms across various sectors including finance, industry, and services. The dependent variable was unexpected stock returns, while the independent variables included discretionary accruals as a proxy for earnings management and abnormal cash flows, with control variables such as firm size, leverage, and industry type. The research adopted a panel data design and purposive sampling technique. The regression analysis findings revealed a significant positive relationship between discretionary accruals and unexpected stock returns, suggesting that earnings management practices could influence market perceptions and valuations in the short term.

Khzer and Sabir Jaf (2023), investigated the role of income smoothing practices on the financial performance of banks listed on the Iraq Stock Exchange, focusing on profitability measures covering the period 2015 to 2019. The dependent variables included return on assets and return on equity, while the independent variable is income smoothing, determined using *Miller's model*. The research employed an explanatory and purposive sampling technique to select five banks with consistently available audited financial statements. Regression analysis was applied to test the hypotheses, which showed a positive association between income smoothing and financial performance, suggesting that banks use smoothing strategies to maintain consistent profitability and attract investors.

Ibobo and Ogbodo (2023), examined the effect of earnings management on the financial performance of manufacturing firms listed on the Nigerian Exchange Group over the period 2012 to 2021. The study analyzes how discretionary accruals influence financial performance indicators such as return on assets, return on equity, earnings per share, and net profit margin. with the independent variable being earnings management measured through discretionary accruals, while leverage and firm size serve as control variables. Using an ex-post facto research design, the study relies on secondary data from the annual reports of 21 purposively sampled manufacturing firms, selected from a population of 54 listed firms based on data availability. The analysis employs the Panel Least Square regression method, whose results underline the implications of earnings manipulation for financial outcomes.

Alexander and Christina (2022), analyzed the impact of earnings management practices on stock returns using data from 86 manufacturing companies listed on the Indonesia Stock Exchange between 2017 and 2019. The study examined accrual earnings management and real activity manipulation as independent variables, with stock return as the dependent variable. Control variables included profitability, sales growth, and firm size. Using a causality research design and multiple regression analysis via SPSS, and based on signaling theory the results showed that accrual earnings management negatively affects stock returns by signaling reduced transparency, which undermines investor confidence. However, real activity manipulation had no significant effect, suggesting firms favor accrual methods for its simplicity highlighting the critical role of transparency in investor decision-making.

2.4 GAP IN LITERATURE

Earnings management (EM) is a critical area of study in financial accounting, as it influences the reliability of financial statements and, consequently, stakeholders' decision-making. While studies globally have increasingly explored REM (e.g., manipulating operating activities like overproduction or cutting discretionary expenses), the Nigerian context has largely focused on AEM. Few studies investigate how REM practices and income smoothing earnings management, such as manipulating cash flows or production costs, affect financial performance metrics like ROA in listed Nigerian firms. This gap is significant, as REM and income smoothing may have more direct operational and long-term consequences for firms compared to AEM, given Nigeria's volatile economic environment and weaker enforcement of accounting standards. Therefore, this study filled in the gap in literature by examining the effect of earnings management (real earnings management, accruals earnings management and income smoothing) on financial performance (ROA) of listed firms in Nigeria using panel GMM.

3.0 METHODOLOGY

3.1 Research design

This study employed *ex post facto* and descriptive research designs in order to achieve the objectives. The use of *ex-post facto research design* is because the study relied on historic accounting data that were extracted from financial statements of the sampled companies; hence there is no intention to control or manipulate the data.

3.2 Sources of data

In this study, secondary source of data collection was employed since the data were sourced from various editions of Nigerian Exchange Group (NGX) fact-book and sampled company's annual

financial reports for the period of interest. This source of data for similar studies is justified by Okoye et., al. (2019).

3.3 Population/sample size of the study

The population of this study consists of all firms listed on the floor of the Nigerian Exchange Group (NGX) as of December 31st, 2024. Specifically, as of 31st December 2024, there were one hundred and forty-nine (149) listed firms in Nigeria (NGX, Website). Based on the foregoing sampling technique, a total of seventy (70) listed firms were selected as the sample size of the study. This is approximately 50% of the population size which is greater than 10% rule of thumb.

3.4 Method of data analysis

The data analysis was conducted using E-view 13 analytical software and Microsoft excel. The analysis of the data includes; descriptive statistics, correlation analysis, multicollinearity test (VIF), unit root test, Panel GMM and Arellano bond test. Descriptive statistics, correlation analysis, multicollinearity test and unit root test serve as pre-estimation test. Panel GMM serves as the estimation test, while Arellano bond test serves as the post estimation test.

3.5 Model specification

$$ROA_{it} = \beta_0 + \beta_1 REM_{it} + \beta_2 AEM_{it} + \beta_3 INSEM_{it} + \mu_{it} \dots\dots\dots(i)$$

Where:

ROA	=	Return on Asset
REM	=	Real Earnings Management
AEM	=	Accrual Earnings Management
INSEM	=	Income Smoothing Earnings Management
β_0	=	Constant
$\beta_1 - \beta_3$	=	Slope Coefficient
μ	=	Stochastic disturbance
i	=	i th company
t	=	period

Thus, the apriori expectation, based on the literature reviewed and related theories, was stated as follows; $\beta_1 X_{1it} < 0$, $\beta_2 X_{2it} < 0$, $\beta_3 X_{3it} < 0$,. The operationalization of earnings management proxies and financial performance proxies are displayed in table 3.2.

3.8. Description of variables

Table 3.2 Operationalization of Variables

Variables	Symbols	Measurement	Authors
FINANCIAL PERFORMANCE			
Return on asset	ROA	Net income divided by total asset	Brigham and Ehrhardt (2017)
EARNINGS MANAGEMENT			
Real earnings management	REM	Cashflow from operations divided by total asset	Roychowdhury (2006)
Accruals earnings management	AEM	Total accruals minus non-discretionary accruals.	Jones (1991)
Income smoothing earnings management	INSEM	Standard deviation of net income divided by Standard deviation of sales.	Eckel's (1982)

Source: Researcher's Compilation (2024)

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

This study earnings management and financial performance of listed firms in Nigeria was analyzed in this chapter. The data were obtained from the Nigerian Exchange Group website. The independent variable (earnings management) is measured using real earnings management (REM), accrual earnings management (AEM) and income smoothing earnings management (INSEM). The dependent variable (financial performance) is measured using return on asset, (ROA).

4.2 Data Analysis

This section analyzes the data presented (Appendix 2-5) with the aid of E-View 9 (Econometric View). The analysis of data is presented in the subsequent sections:

4.2.1 Correlation Matrix

This section of the chapter presents in the table below the result of the correlation analysis between the independent variables to ascertain if there is sign of multicollinearity in model.

Table: 4.1 Correlations

	REM	AEM	INSEM
REM	1.000000	0.139259	-0.083398
AEM	0.139259	1.000000	-0.210820
INSEM	-0.083398	-0.210820	1.000000

Source: E-View Output extracted from appendix 2B

Table 4.1 showed the correlation matrix of the variables employed in this study. Correlation considers two variables at a time to determine how they relate to each other. These types of checks are necessary because high correlation cause problems about the relative contribution of each predictor to the success of the model. It helps to detect multicollinearity. The correlation matrix above shows the absence of multicollinearity among the explanatory. All the variables show a low

correlation with the highest correlation estimated at 0.139259. This is less than 0.75. According to Gujarati (2001), correlation matrix value of 0.75 is considered harmful.

4.2.2 Variance inflation factor (VIF)

Table 4.2: Variance inflation factor for Multicollinearity test

Variables	Coefficient variance	Uncentered VIF	Centered VIF
C	0.008477	60.75326	NA
REM	0.003661	1.225692	1.022965
AEM	0.000150	55.41520	1.063099
INSEM	0.001866	2.928629	1.049784

Source: E-View output extracted from Appendix 2C

The variance inflation factor (VIF) is used to check the level of multicollinearity that exist between the independent variables. If the independent variables are highly correlated making it difficult to isolate the individual effect of the variables, it means that there is problem and the independent variables cannot give a dependable and reliable result. The criterion is that any time the centered VIF have values between 5-10, this implies that there is sign of multicollinearity. From the result, the centered VIF have values less than 5 which implies that the independent variables are free from multicollinearity.

4.2.3 Effect of Earnings Management on the Return on Asset (ROA)

Table 4.3 provides the summary of the GMM test results of the effect of earnings management on ROA based on fixed effect GMM.

Table 4.3: Test result of the effect of REM, AEM and INSEM on ROA of listed firms in Nigeria.

Dependent variable: ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROA(-1)	-0.048682	0.025218	-1.930477	0.0543
REM	0.198120	0.012552	15.78451	0.0000
AEM	0.048928	0.008766	5.581774	0.0000
INSEM	0.231423	0.014650	15.79725	0.0000
C	-0.379402	0.061999	-6.119484	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.771314	Mean dependent var	0.071529	
Adjusted R-squared	0.727640	S.D. dependent var	0.084327	
S.E. of regression	0.044009	Akaike info criterion	-3.261424	
Sum squared resid	0.730156	Schwarz criterion	-2.594812	
Log likelihood	806.8203	Hannan-Quinn criter.	-2.998687	
F-statistic	17.66043	Durbin-Watson stat	1.839777	
Prob(F-statistic)	0.000000			

Source: Extracted from author's computations in Appendix 5B.

Table 4.3 provides results of the effect of earnings management on return on asset (ROA). The R^2 otherwise known as the coefficient of determination shows the percentage of the total variation of the dependent variable (ROA) that can be explained by the independent or explanatory variables (REM, AEM and INSEM). Thus the R^2 value of approximately 0.771 indicates that 77.1% of the variation in the ROA of listed firms can be explained by a variation in the earnings management while the remaining 22.9% (i.e. $100-R^2$) could be accounted by other factors not included in this model. The adjusted R^2 of approximately 0.728 indicates that if other factors are considered in the model, this result will deviate from it by only 0.043 (i.e. $0.771 - 0.728$). This result shows that there will be a further deviation of the variation caused by the independent factors to be included by 0.043%.

The regression results as presented in table 4.3 above to determine the relationship between REM, AEM & INSEM and ROA shows that when all the independent variables are held stationary; the ROA variable is estimated at -0.379402. This simply implies that when all independent variables are held constant, there will be a decrease in the ROA of listed firms up to the tune of 0.379402% occasioned by factors not incorporated in this study. Thus, a unit increase in REM will lead to an increase in ROA by 0.198120%. For AEM, a unit increase in AEM will lead to an increase in ROA by 0.048928%. For INSEM, a unit increase in INSEM will lead to an increase in ROA by 0.231423%. Finally, table 4.10 provides results to evaluate the validity of ROA model using the F-statistic of 17.66043. The probability of the F-statistic is reported as 0.00000, further indicating that the model is valid and can be relied upon in predicting the effect of earnings management on net profit margin.

4.3 Test of Hypotheses

In testing the hypotheses, the study made use of the results in tables 4.8, 4.10, and 4.12. To test each of the hypotheses, the decision rule stated in chapter 3 is used.

H0₁: Real earnings management practice has no significant effect on return on assets of listed firms in Nigeria.

Results in table 4.3 indicates that the t-statistic for REM of 15.78451 is significant at 5% level (P-value = $0.0000 < 0.05$). Accordingly, **H0₁** is rejected, and the conclusion is real earnings management practice has a significant effect on return on assets of listed firms in Nigeria.

H0₂: Accrual earnings management practice has no significant effect on return on assets of listed firms in Nigeria.

Results in table 4.3 indicates that the t-statistic for AEM of 5.581774 is significant at 5% level (P-value = $0.0000 < 0.05$). Accordingly, **H0₂** is rejected, and the conclusion is accrual earnings management practice has a significant effect on return on assets of listed firms in Nigeria.

H0₃: Income smoothing earnings management has no significant effect on return on assets of listed firms in Nigeria.

Results in table 4.3 indicates that the t-statistic for INSEM of 15.79725 is significant at 5% level (P-value = $0.0000 < 0.05$). Accordingly, **H0₃** is rejected, and the conclusion is income smoothing earnings management has a significant effect on return on assets of listed firms in Nigeria.

4.4 Discussion on findings

The findings revealed that real earnings management, accruals earnings management and income smoothing earnings management have a significant effect on return on asset of listed firms in Nigeria. The result is in conformity with the evidence of Xu, Zet al. (2019), investigated real earnings management strategies in bankrupt firms, analyzing their motivations, trade-offs with

accrual-based earnings management, and implications for future performance. A matched-pair design and multiple regression analysis revealed that while real earnings management temporarily mitigates financial strain, it leads to long-term performance deterioration, reflecting the costly consequences of such strategies for firms under financial distress. Also, Abdul Kerim *et al.*, (2020), explored the role of real earnings management in shaping the financial performance of listed manufacturing firms in Nigeria, with a focus on the food, beverages, and tobacco sectors. Data from 2013 to 2019 were collected from the Nigerian Exchange Group, covering abnormal cash flows, production costs, and discretionary expenses as independent variables. Financial performance was measured through return on equity, return on assets, and earnings per share. Panel regression analysis revealed that real earnings management have no significant impact on return on equity or return on assets but had a significant influence on earnings per share, particularly through discretionary expenses.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study examined the effect of earnings management on financial performance of firms in Nigeria. The independent variable (earnings management) is measured using real earnings management (REM), accrual earnings management (AEM) and income smoothing earnings management (INSEM). The dependent variable (financial performance) is measured using return on asset, (ROA). The study was carried for the period of 10 years (2015 to 2024). The data collected were analyzed using Panel GMM. The study revealed the following:

- i. Real earnings management practice has a significant effect on return on assets of listed firms in Nigeria.
- ii. Accrual earnings management practice has a significant effect on return on assets of listed firms in Nigeria.
- iii. Income smoothing earnings management has a significant effect on return on assets of listed firms in Nigeria.

5.2 Recommendations

Based on the findings, the following recommendations were made:

- (i) Firms should adopt transparent disclosure practices, providing detailed breakdowns of earnings components. Clear reporting reduces opportunities for real earnings management (e.g., manipulating cash flows or expenses), ensuring that return on asset is not distorted by short-term manipulations.
- (ii) Firms should invest in ethics training for management and finance teams to discourage earnings management practices. Ethical leadership can prioritize long-term financial health over short-term boosts to return on asset, aligning reported performance with actual operational efficiency.
- (iii) To reduce income smoothing, firms should design executive compensation packages tied to long-term performance metrics rather than short-term earnings targets. This approach minimizes the incentive to manipulate earnings, stabilizing return on asset over time.

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